

Marginal calculations

Hanna, Yien

Marginal Cost

- Additional cost of producing an extra unit of output
- Change in costs (total or variable) resulting from a change in level of output
- $MC = \Delta TC / \Delta q$

Schedule:

Units of Output	Total Cost (Dollars)	Marginal Cost (Dollars)
1	5	5
2	9	4
3	12	3
4	16	4
5	21	5
6	29	8

Graph/Diagram:

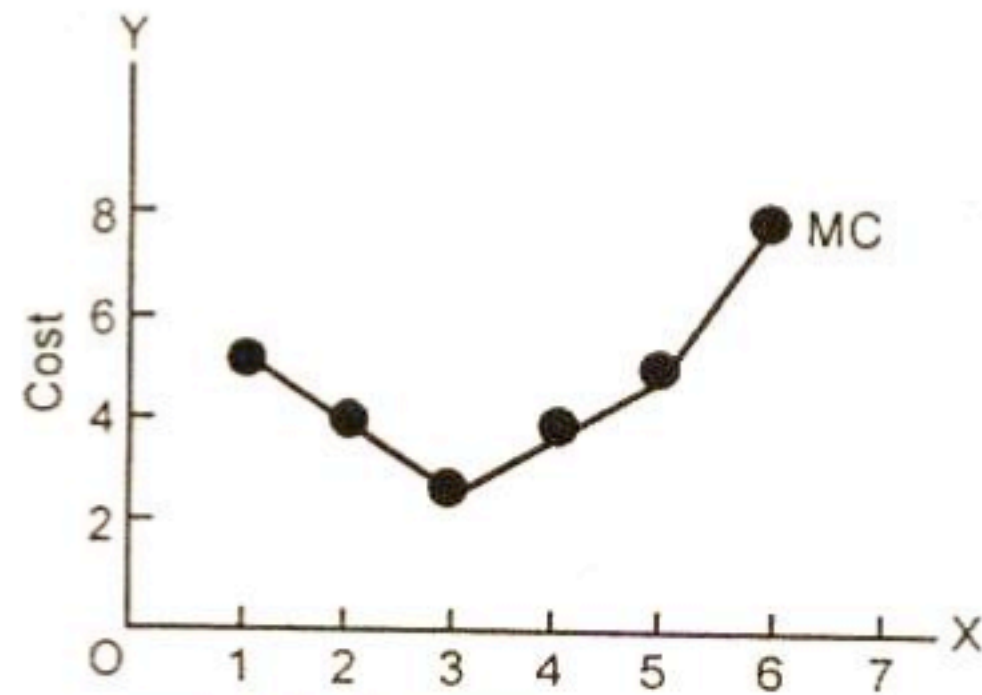
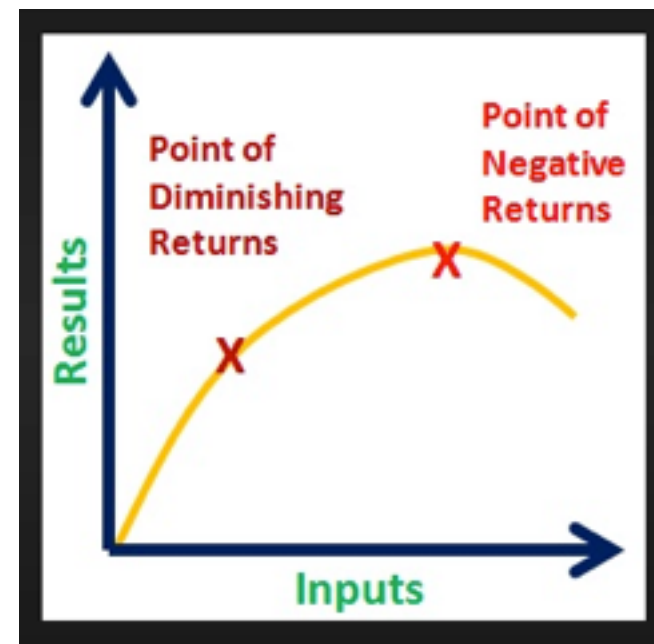


Fig. 13.8 Output

Marginal Profit

- Extra output that is produced by using an extra unit of the variable factor
- Should decrease over time, *ceteris paribus*
- $MP = \Delta TP / \Delta V$



Marginal revenue

- Additional revenue when an additional unit of a product is sold in a given time period
- $MR = \Delta TR / \Delta q$

TABLE 1 Firm Output, Revenues, Costs, and Profits

Total product	Total revenue	Marginal revenue	Total cost	Average total cost	Marginal cost	Firm profits
0	\$0		\$100	—		−\$100
5	50		120	\$24.00		−70
15	150		140	9.33		10
23	230		160	6.96		70
27	270		180	6.66		90
29	290		200	6.90		90
30	300		220	7.33		80

and also Marginal Profit

TABLE 1 Firm Output, Revenues, Costs, and Profits

Total product	Total revenue	Marginal revenue	Total cost	Average total cost	Marginal cost	Firm profits	Marginal profit
0	\$0	—	\$100	—	—	−\$100	—
5	50	\$10	120	\$24.00	\$4.0	−70	—
15	150	10	140	9.33	2.0	10	\$8
23	230	10	160	6.96	2.5	70	7.5
27	270	10	180	6.66	5.0	90	4
29	290	10	200	6.90	10.0	90	0
30	300	10	220	7.33	20.0	80	−10